



# South Coast Air Quality Management District

21865 Copley Drive, Diamond Bar, CA 91765-4178  
(909) 396-2000 • www.aqmd.gov

March 27, 2008

Mr. Steve Bean  
Facility Manager  
Carson Cogeneration Company  
17171 South Central Avenue  
Carson, CA 90746

Dear Mr. Bean:

Please find attached the facility permit (ID No. 118406) for equipment to be located at Carson Cogeneration Company, 17171 S. Central Avenue, Carson, CA 90746. The applications listed in the table below have been submitted for change of conditions to reflect revised emission factors for both VOC and PM10 in Facility Permit Condition A63.2. The proposed change of conditions was submitted to EPA on January 30, 2008 for review and comment. The 45-Day review period ended on March 16, 2008 with AQMD receiving no comments from EPA. Therefore, the revisions have been approved for Permits to Operate and have been included in Section D of your Facility Permit. The corresponding application numbers are summarized in the table below:

A/N	Equipment Description	Section	Device No.	Action
476906	Gas Turbine	D	D19	Change of Conditions
477258				Title V Minor Permit Revision

Please review the attached Section D carefully, then insert the enclosed section into your Facility Permit and discard the earlier version. Questions concerning your permit should be directed to Mr. Kenneth L. Coats at (909) 396-2527.

Sincerely,

*Michael D. Mills*

Michael D. Mills, P.E.  
Senior Manager  
General Commercial and Energy Team  
Engineering and Compliance

CM:JTY:KLC  
Attachments

cc: Gerardo Rios, EPA  
Ed Pupka, AQMD Compliance  
Energy Team Files

*Cleaning the air from the exhaust*



SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT  
21865 Copley Drive, Diamond Bar, CA 91765

Title Page  
Facility I.D.#: 118406  
Revision #: 22  
Date: March 27, 2008

## FACILITY PERMIT TO OPERATE

**CARSON COGENERATION COMPANY  
17171 S CENTRAL AVE  
CARSON, CA 90746**

### NOTICE

IN ACCORDANCE WITH RULE 206, THIS PERMIT TO OPERATE OR A COPY THEREOF MUST BE KEPT AT THE LOCATION FOR WHICH IT IS ISSUED.

THIS PERMIT DOES NOT AUTHORIZE THE EMISSION OF AIR CONTAMINANTS IN EXCESS OF THOSE ALLOWED BY DIVISION 26 OF THE HEALTH AND SAFETY CODE OF THE STATE OF CALIFORNIA OR THE RULES OF THE SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT. THIS PERMIT SHALL NOT BE CONSTRUED AS PERMISSION TO VIOLATE EXISTING LAWS, ORDINANCES, REGULATIONS OR STATUTES OF ANY OTHER FEDERAL, STATE OR LOCAL GOVERNMENTAL AGENCIES.

Barry R. Wallerstein, D. Env.  
EXECUTIVE OFFICER

By Mike Mills for  
Carol Coy  
Deputy Executive Officer  
Engineering & Compliance



## **FACILITY PERMIT TO OPERATE CARSON COGENERATION COMPANY**

### **TABLE OF CONTENTS**

Section	Description	Revision #	Date Issued
A	Facility Information	11	01/18/2008
B	RECLAIM Annual Emission Allocation	14	01/01/2008
C	Facility Plot Plan	TO BE DEVELOPED	
D	Facility Description and Equipment Specific Conditions	15	03/27/2008
E	Administrative Conditions	13	01/01/2006
F	RECLAIM Monitoring and Source Testing Requirements	11	01/01/2006
G	Recordkeeping and Reporting Requirements for RECLAIM Sources	12	01/01/2006
H	Permit To Construct and Temporary Permit to Operate	12	04/25/2007
I	Compliance Plans & Schedules	8	01/01/2006
J	Air Toxics	5	01/01/2006
K	Title V Administration	5	01/01/2006
Appendix			
A	NOx and SOx Emitting Equipment Exempt From Written Permit Pursuant to Rule 219	7	01/01/2006
B	Rule Emission Limits	6	01/01/2006



## FACILITY PERMIT TO OPERATE CARSON COGENERATION COMPANY

### SECTION D: FACILITY DESCRIPTION AND EQUIPMENT SPECIFIC CONDITIONS

The operator shall comply with the terms and conditions set forth below:

Equipment	ID No.	Connected To	RECLAIM Source Type/ Monitoring Unit	Emissions * And Requirements	Conditions
<b>Process 1 : INTERNAL COMBUSTION</b>					
<b>System 1 : POWER GENERATION (COGEN.)</b>					
GAS TURBINE, NATURAL GAS, GENERAL ELECTRIC, MODEL LM6000, WITH STEAM OR WATER INJECTION, 407.7 MMBTU/HR WITH A/N: 476908	D19	C3		<p>CO: 2000 PPMV NATURAL GAS (5) [RULE 407,4-2-1982] ; CO: 4.8 PPMV NATURAL GAS (4) [RULE 1303(a)(1)-BACT,5-10-1996;RULE 1303(a)(1)-BACT,12-6-2002]</p> <p>NOX: 106 PPMV NATURAL GAS (8) [40CFR 60 Subpart GG,2-24-2006] ; NOX: 2.5 PPMV NATURAL GAS (4) [RULE 1303(a)(1)-BACT,5-10-1996</p> <p>RULE 1303(a)(1)-BACT,12-6-2002] ; PM10: 0.1 GRAINS/SCF NATURAL GAS (5) [RULE 409,8-7-1981] ; PM10: 0.01 GRAINS/SCF NATURAL GAS (5A) [RULE 475,10-8-1976</p> <p>RULE 475,8-7-1978] ; PM10: 11 LBS/HR NATURAL GAS (5B) [RULE 475,10-8-1976;RULE 475,8-7-1978] ; SO2: (9) [40CFR 72 - Acid Rain Provisions,11-24-1997]</p> <p>SOX: 150 PPMV NATURAL GAS (8) [40CFR 63 Subpart GG,4-20-2006] ; VOC: 2 PPMV NATURAL GAS (4) [RULE 1303(a)(1)-BACT,5-10-1996</p>	<p>A63.2, A99.4, A99.6, A195.1, A195.2, A195.4, A327.1, D12.4, D12.5, D12.6, D29.1, D29.3, D82.1,</p> <p>E179.1, E179.2, K40.1, K67.1</p>

- \* (1)(1A)(1B) Denotes RECLAIM emission factor  
(3) Denotes RECLAIM concentration limit  
(5)(5A)(5B) Denotes command and control emission limit  
(7) Denotes NSR applicability limit  
(9) See App B for Emission Limits
- (2)(2A)(2B) Denotes RECLAIM emission rate  
(4) Denotes BACT emission limit  
(6) Denotes air toxic control rule limit  
(8)(8A)(8B) Denotes 40 CFR limit(e.g. NSPS, NESHAPS, etc.)  
(10) See Section J for NESHAP/MACT requirements

\*\* Refer to Section F and G of this permit to determine the monitoring, recordkeeping and reporting requirements for this device.



## FACILITY PERMIT TO OPERATE CARSON COGENERATION COMPANY

### SECTION D: FACILITY DESCRIPTION AND EQUIPMENT SPECIFIC CONDITIONS

The operator shall comply with the terms and conditions set forth below:

Equipment	ID No.	Connected To	RECLAIM Source Type/ Monitoring Unit	Emissions * And Requirements	Conditions
<b>Process 1 : INTERNAL COMBUSTION</b>					
GENERATOR, ELECTRICAL, 39 MW  BOILER, UNFIRED  TURBINE, STEAM, 82,000 LB/HR  GENERATOR, ELECTRIC, 10.5 MW				RULE 1303(a)(1)-BACT,12-6-2002]	
SELECTIVE CATALYTIC REDUCTION, BABCOCK HITACHI, WITH A PLATE TYPE CATALYST AND METERING AND INJECTION GRID, WIDTH: 12 FT 4 IN; DIAMETER: 4 FT 10 IN; HEIGHT: 31 FT 5 IN A/N: 349726	C4	C3		NH3: 10 PPMV NATURAL GAS (4) [RULE 1303(a)(1)-BACT,5-10-1996]	A99.7, A195.5
REACTOR, CO OXIDATION CATALYST A/N: 349726	C3	C4 D19			
<b>System 2 : EMERGENCY POWER</b>					
INTERNAL COMBUSTION ENGINE, EMERGENCY POWER, DIESEL FUEL, CATER PILLAR, MODEL 3406DI, WITH TURBOCHARGER, 302 BHP WITH A/N: 349727  GENERATOR, 200 KW	D10		NOX: PROCESS UNIT**	NOX: 469 LBS/1000 GAL DIESEL (1) [RULE 2012,5-11-2001;RULE 2012,12-5-2003] ; PM: (9) [RULE 404,2-7-1986]	C1.1, D12.3, E114.1, E162.1, K48.1

- |   |  |
|---|--|
| <p>* (1)(1A)(1B) Denotes RECLAIM emission factor<br/>(3) Denotes RECLAIM concentration limit<br/>(5)(5A)(5B) Denotes command and control emission limit<br/>(7) Denotes NSR applicability limit<br/>(9) See App B for Emission Limits</p> | <p>(2)(2A)(2B) Denotes RECLAIM emission rate<br/>(4) Denotes BACT emission limit<br/>(6) Denotes air toxic control rule limit<br/>(8)(8A)(8B) Denotes 40 CFR limit(e.g. NSPS, NESHAPS, etc.)<br/>(10) See Section J for NESHAP/MACT requirements</p> |
|---|--|

\*\* Refer to Section F and G of this permit to determine the monitoring, recordkeeping and reporting requirements for this device.



## FACILITY PERMIT TO OPERATE CARSON COGENERATION COMPANY

### SECTION D: FACILITY DESCRIPTION AND EQUIPMENT SPECIFIC CONDITIONS

The operator shall comply with the terms and conditions set forth below:

Equipment	ID No.	Connected To	RECLAIM Source Type/ Monitoring Unit	Emissions * And Requirements	Conditions
<b>Process 2 : INORGANIC CHEMICAL STORAGE, PRESSURE TANKS</b>					
STORAGE TANK, ANHYDROUS AMMONIA A/N: 349726	D5				
<b>Process 3 : RULE 219 EXEMPT EQUIPMENT SUBJECT TO SOURCE-SPECIFIC RULES</b>					
RULE 219 EXEMPT EQUIPMENT, AIR CONDITIONING UNITS	E13				H23.3
RULE 219 EXEMPT EQUIPMENT, COOLING TOWERS	E15				H23.1
RULE 219 EXEMPT EQUIPMENT, HALON UNIT	E16				H23.4
RULE 219 EXEMPT EQUIPMENT, COATING EQUIPMENT, PORTABLE, ARCHITECTURAL COATINGS	E17			VOC: (9) [RULE 1113, 11-8-1996; RULE 1113, 12-5-2003; RULE 1171, 8-2-2002; RULE 1171, 11-7-2003]	K67.2
RULE 219 EXEMPT EQUIPMENT, OIL WATER SEPARATORS, GRAVITY-TYPE, < 45 FT <sup>2</sup> AIR/LIQUID INTERFACIAL AREA	E18				H23.2

\* (1)(1A)(1B) Denotes RECLAIM emission factor

(3) Denotes RECLAIM concentration limit

(5)(5A)(5B) Denotes command and control emission limit

(7) Denotes NSR applicability limit

(9) See App B for Emission Limits

(2)(2A)(2B) Denotes RECLAIM emission rate

(4) Denotes BACT emission limit

(6) Denotes air toxic control rule limit

(8)(8A)(8B) Denotes 40 CFR limit (e.g. NSPS, NESHAPS, etc.)

(10) See Section J for NESHAP/MACT requirements

\*\* Refer to Section F and G of this permit to determine the monitoring, recordkeeping and reporting requirements for this device.



**FACILITY PERMIT TO OPERATE  
CARSON COGENERATION COMPANY**

**SECTION D: DEVICE ID INDEX**

**The following sub-section provides an index  
to the devices that make up the facility  
description sorted by device ID.**



**FACILITY PERMIT TO OPERATE  
CARSON COGENERATION COMPANY**

**SECTION D: DEVICE ID INDEX**

Device Index For Section D			
Device ID	Section D Page No.	Process	System
C3	2	1	1
C4	2	1	1
D5	3	2	0
D10	2	1	2
E13	3	3	0
E15	3	3	0
E16	3	3	0
E17	3	3	0
E18	3	3	0
D19	1	1	1





## **FACILITY PERMIT TO OPERATE CARSON COGENERATION COMPANY**

### **SECTION D: FACILITY DESCRIPTION AND EQUIPMENT SPECIFIC CONDITIONS**

The operator shall comply with the terms and conditions set forth below:

#### **FACILITY CONDITIONS**

F9.1 Except for open abrasive blasting operations, the operator shall not discharge into the atmosphere from any single source of emissions whatsoever any air contaminant for a period or periods aggregating more than three minutes in any one hour which is:

- (a) As dark or darker in shade as that designated No.1 on the Ringelmann Chart, as published by the United States Bureau of Mines; or
- (b) Of such opacity as to obscure an observer's view to a degree equal to or greater than does smoke described in subparagraph (a) of this condition.

[RULE 401, 3-2-1984; RULE 401, 9-11-1998]

F14.1 The operator shall not use fuel oil containing sulfur compounds in excess of 0.05 percent by weight.

[RULE 431.2, 5-4-1990]

F14.2 The operator shall not purchase diesel fuel containing sulfur compounds in excess of 15 ppm by weight as supplied by the supplier.

This condition shall become effective on or after June 1, 2004.

[RULE 431.2, 9-15-2000]



## FACILITY PERMIT TO OPERATE CARSON COGENERATION COMPANY

### SECTION D: FACILITY DESCRIPTION AND EQUIPMENT SPECIFIC CONDITIONS

The operator shall comply with the terms and conditions set forth below:

F18.1 Acid Rain SO<sub>2</sub> Allowance Allocation for affected units are as follows:

Device ID	Turbine ID	Contaminant	Tons in any year
1	LM6000 CTG	SO <sub>2</sub>	0

- a). The allowance allocation(s) shall apply to calendar years 2000 through 2009.
- b). The number of allowances allocated to Phase II affected units by U.S. EPA may change in a 1998 revision to 40CFR73 Tables 2,3, and 4. In addition, the number of allowances actually held by an affected source in a unit account may differ from the number allocated by U.S. EPA. Neither of the aforementioned conditions necessitate a revision to the unit SO<sub>2</sub> allowance allocations identified in this permit (see 40 CFR 72.84)

[40CFR 73 Subpart B, 1-11-1993]

F24.1 Accidental release prevention requirements of Section 112(r)(7):

- a). The operator shall comply with the accidental release prevention requirements pursuant to 40 CFR Part 68 and shall submit to the Executive Officer, as a part of an annual compliance certification, a statement that certifies compliance with all of the requirements of 40 CFR Part 68, including the registration and submission of a risk management plan (RMP).
- b). The operator shall submit any additional relevant information requested by the Executive Officer or designated agency.

[40CFR 68 - Accidental Release Prevention, 5-24-1996]

### DEVICE CONDITIONS

#### A. Emission Limits



## FACILITY PERMIT TO OPERATE CARSON COGENERATION COMPANY

### SECTION D: FACILITY DESCRIPTION AND EQUIPMENT SPECIFIC CONDITIONS

The operator shall comply with the terms and conditions set forth below:

A63.2 The operator shall limit emissions from this equipment as follows:

CONTAMINANT	EMISSIONS LIMIT
CO	Less than or equal to 3779 LBS IN ANY ONE MONTH
PM10	Less than or equal to 1800 LBS IN ANY ONE MONTH
VOC	Less than or equal to 773 LBS IN ANY ONE MONTH
SOX	Less than or equal to 1001 LBS IN ANY ONE MONTH

The operator shall calculate the emission limit(s) by using monthly fuel use data and the following emission factors: PM10 5.3 lb/mmcf; VOC 2.0 lb/mmcf; and SOx 0.71 lb/mmcf

The operator shall calculate the emission limit(s) for compliance with the monthly CO limit through valid CEMS data. In the absence of valid CEMS data, the operator shall calculate the monthly CO emissions using monthly fuel use data and the following emission factor: CO 84.5 lb/mmcf during start-up period and 11.0 lb/mmcf for all other operations

[RULE 1303(b)(2)-Offset, 5-10-1996]

[Devices subject to this condition : D19]

A99.4 The 4.8 PPM CO emission limit(s) shall not apply when the equipment is starting up or shutting down. Startup time shall not exceed 45 minutes for each startup. The operator shall provide the AQMD with written notification of the startup date. Written records of startups shall be maintained and made available upon request from AQMD. The shutdown time shall not exceed 10 minutes for each shutdown. The 4.8 ppmv CO limit is based on a 3-hour rolling average.

[RULE 1303(a)(1)-BACT, 5-10-1996]

[Devices subject to this condition : D19]



## **FACILITY PERMIT TO OPERATE CARSON COGENERATION COMPANY**

### **SECTION D: FACILITY DESCRIPTION AND EQUIPMENT SPECIFIC CONDITIONS**

The operator shall comply with the terms and conditions set forth below:

- A99.6 The 2.5 PPM NOX emission limit(s) shall not apply during turbine start-up or shutdown. Start-up time shall not exceed 45 minutes for each start-up. The operator shall provide the AQMD with written notification of start-up date. Written records of start-ups shall be maintained and made available upon request from AQMD. The shutdown time shall not exceed 10 minutes for each shutdown.

[RULE 1303(a)(1)-BACT, 5-10-1996; RULE 1303(a)(1)-BACT, 12-6-2002]

[Devices subject to this condition : D19]

- A99.7 The 10 PPM NH3 emission limit(s) shall not apply during turbine start-up or shutdown. Start-up time shall not exceed 45 minutes for each start-up. The operator shall provide the AQMD with written notification of start-up date. Written records of the start-ups shall be maintained and made available upon request from AQMD. The shutdown time shall not exceed 10 minutes for each shutdown.

[RULE 1303(a)(1)-BACT, 5-10-1996; RULE 1303(a)(1)-BACT, 12-6-2002]

[Devices subject to this condition : C4]

- A195.1 The 2.5 PPMV NOX emission limit(s) is averaged over 60 minutes at 15% O2, dry.

[RULE 2005, 4-9-1999; RULE 2005, 4-20-2001]

[Devices subject to this condition : D19]

- A195.2 The 4.8 PPMV CO emission limit(s) is averaged over 180 minutes at 15 % O2, dry.

[RULE 1303(a)(1)-BACT, 5-10-1996]

[Devices subject to this condition : D19]

- A195.4 The 2.0 PPMV ROG emission limit(s) is averaged over 60 minutes at 15% O2, dry.

[RULE 1303(a)(1)-BACT, 5-10-1996]

[Devices subject to this condition : D19]



## **FACILITY PERMIT TO OPERATE CARSON COGENERATION COMPANY**

### **SECTION D: FACILITY DESCRIPTION AND EQUIPMENT SPECIFIC CONDITIONS**

The operator shall comply with the terms and conditions set forth below:

A195.5 The 10 PPMV NH<sub>3</sub> emission limit(s) is averaged over 60 minutes at 15% O<sub>2</sub>, dry basis. The operator shall calculate and continuously record the NH<sub>3</sub> slip concentration using the following formula:

$$\text{NH}_3 \text{ (ppmv)} = [a-b*c/1\text{EE}+06] * 1\text{EE}+06/b$$

where a=NH<sub>3</sub> injection rate (lb/hr)/17 lb/lb-mol

b=dry exhaust gas flow rate (scf/hr) / 385.3 scf/lb-mol

c=change in measured NO<sub>x</sub> across the SCR (ppmv at 15% O<sub>2</sub>)

The operator shall install and maintain a NO<sub>x</sub> analyzer to measure the SCR inlet NO<sub>x</sub> ppmv accurate to plus or minus 5 percent calibrated at least once every twelve months.

The NO<sub>x</sub> analyzer shall be installed and operated within 90 days of initial start-up. The operator shall use the above described method or another alternative method approved by the Executive Officer.

The ammonia slip calculation procedures described above shall not be used for compliance determination or emission information without corroborative data using an approved reference method for the determination of ammonia.

**[RULE 1303(a)(1)-BACT, 5-10-1996; RULE 1303(a)(1)-BACT, 12-6-2002; RULE 2012, 5-6-2005]**

[Devices subject to this condition : C4]

A327.1 For the purpose of determining compliance with District Rule 475, combustion contaminant emissions may exceed the concentration limit or the mass emission limit listed, but not both limits at the same time.

**[RULE 475, 10-8-1976; RULE 475, 8-7-1978]**

[Devices subject to this condition : D19]

### **C. Throughput or Operating Parameter Limits**

C1.1 The operator shall limit the operating time to no more than 200 hour(s) in any one year.

**[RULE 1110.2, 11-14-1997; RULE 1304(a)-Modeling and Offset Exemption, 6-14-1996]**

[Devices subject to this condition : D10]



## **FACILITY PERMIT TO OPERATE CARSON COGENERATION COMPANY**

### **SECTION D: FACILITY DESCRIPTION AND EQUIPMENT SPECIFIC CONDITIONS**

The operator shall comply with the terms and conditions set forth below:

#### **D. Monitoring/Testing Requirements**

- D12.3 The operator shall install and maintain a(n) non-resettable elapsed time meter to accurately indicate the elapsed operating time of the engine.

[RULE 1110.2, 11-14-1997; RULE 1304(a)-Modeling and Offset Exemption, 6-14-1996]

[Devices subject to this condition : D10]

- D12.4 The operator shall install and maintain a(n) flow meter to accurately indicate the flow rate of the total hourly throughput of injected ammonia (NH<sub>3</sub>).

The operator shall also install and maintain a device to continuously record the parameter being measured.

The measuring device or gauge shall be accurate to within plus or minus 5 percent. It shall be calibrated once every 12 months.

[RULE 1303(a)(1)-BACT, 5-10-1996]

[Devices subject to this condition : D19]

- D12.5 The operator shall install and maintain a(n) temperature gauge to accurately indicate the temperature in the exhaust at the inlet to the SCR reactor.

The operator shall also install and maintain a device to continuously record the parameter being measured.

The measuring device or gauge shall be accurate to within plus or minus 5 percent. It shall be calibrated once every 12 months.

[RULE 1303(a)(1)-BACT, 5-10-1996]

[Devices subject to this condition : D19]



## FACILITY PERMIT TO OPERATE CARSON COGENERATION COMPANY

### SECTION D: FACILITY DESCRIPTION AND EQUIPMENT SPECIFIC CONDITIONS

The operator shall comply with the terms and conditions set forth below:

- D12.6 The operator shall install and maintain a(n) pressure gauge to accurately indicate the differential pressure across the SCR catalyst bed in inches of water column.

The operator shall also install and maintain a device to continuously record the parameter being measured.

The measuring device or gauge shall be accurate to within plus or minus 5 percent. It shall be calibrated once every 12 months.

[RULE 1303(a)(1)-BACT, 5-10-1996]

[Devices subject to this condition : D19]

- D29.1 The operator shall conduct source test(s) for the pollutant(s) identified below.

Pollutant(s) to be tested	Required Test Method(s)	Averaging Time	Test Location
NH3 emissions	District method 207.1 and 5.3 or EPA method 17	1 hour	Outlet

The test shall be conducted and the results submitted to the District within 45 days after the test date. The AQMD shall be notified of the date and time of the test at least 7 days prior to the test.

The test shall be conducted at least quarterly during the first twelve months of operation and at least annually thereafter. The NOx concentration, as determined by the CEMS, shall be simultaneously recorded during the ammonia slip test. If the CEMS is inoperable, a test shall be conducted to determine the NOx emissions using District Method 100.1 measured over a 60 minute averaging time period.

The test shall be conducted to demonstrate compliance with the Rule 1303 concentration limit.

[RULE 1303(a)(1)-BACT, 5-10-1996]

[Devices subject to this condition : D19]



## FACILITY PERMIT TO OPERATE CARSON COGENERATION COMPANY

### SECTION D: FACILITY DESCRIPTION AND EQUIPMENT SPECIFIC CONDITIONS

The operator shall comply with the terms and conditions set forth below:

D29.3 The operator shall conduct source test(s) for the pollutant(s) identified below.

Pollutant(s) to be tested	Required Test Method(s)	Averaging Time	Test Location
CO emissions	District method 100.1	1 hour	Outlet of the SCR serving this equipment
SOX emissions	Approved District method	District-approved averaging time	Fuel sample
ROG emissions	Approved District method	1 hour	Outlet of the SCR serving this equipment
PM emissions	District method 5.2	District-approved averaging time	Outlet of the SCR serving this equipment

The test(s) shall be conducted at least once every three years.

The test shall be conducted and the results submitted to the District within 60 days after the test date. The AQMD shall be notified of the date and time of the test at least 7 days prior to the test.

The test shall be conducted to demonstrate compliance with the Rule 1303 concentration and emission limit.

The test shall be conducted for compliance verification of the BACT VOC 2.0 ppmv limit.

For natural gas fired turbines only, this shall be demonstrated by the following test method: a) Stack gas samples are extracted into Summa canisters, maintaining a final canister pressure between 400-500 mm Hg absolute, b) Pressurization of Summa canisters is done with zero gas analyzed/certified to containing less than 0.05 ppmv total hydrocarbons as carbon, and

c) Analysis of Summa canisters is per EPA Method TO-12 (with pre-concentration) and the temperature of the Summa canisters when extracting samples for analysis is not to be below 70 degrees F

The use of this alternative method does not mean that it is more accurate than AQMD Method 25.3, nor does it mean that it may be used in lieu of AQMD method 25.3 without prior approval, except for the determination of compliance with the VOC BACT level of 2.0 ppmv calculated as carbon for natural gas fired turbines

Because the BACT level was set using data derived from various source test methods, this alternate methods provides a fair comparison and represents the best sampling and analysis technique for this purpose at this time. The test results must be reported with two significant digits.

[RULE 1303(a)(1)-BACT, 5-10-1996; RULE 1303(b)(2)-Offset, 5-10-1996]





## **FACILITY PERMIT TO OPERATE CARSON COGENERATION COMPANY**

### **SECTION D: FACILITY DESCRIPTION AND EQUIPMENT SPECIFIC CONDITIONS**

The operator shall comply with the terms and conditions set forth below:

[Devices subject to this condition : D19]

D82.1 The operator shall install and maintain a CEMS to measure the following parameters:

CO concentration in ppmv

O2 concentration in ppmv

The CEMS will convert the actual CO concentrations to mass emission rates (lbs/hr) and record the hourly emission rates on a continuous basis.

[RULE 1303(a)(1)-BACT, 5-10-1996]

[Devices subject to this condition : D19]

### **E. Equipment Operation/Construction Requirements**

E114.1 The operator shall not use this equipment in conjunction with any utility voluntary demand reduction program.

[RULE 1304(a)-Modeling and Offset Exemption, 6-14-1996]

[Devices subject to this condition : D10]

E162.1 The operator shall use this equipment only during utility failure periods, except for maintenance purposes.

[RULE 1110.2, 11-14-1997]

[Devices subject to this condition : D10]



## FACILITY PERMIT TO OPERATE CARSON COGENERATION COMPANY

### SECTION D: FACILITY DESCRIPTION AND EQUIPMENT SPECIFIC CONDITIONS

The operator shall comply with the terms and conditions set forth below:

E179.1 For the purpose of the following condition number(s), continuously record shall be defined as recording at least once every hour and shall be calculated upon the average of the continuous monitoring for that hour.

Condition Number D 12- 4

Condition Number D 12- 5

[RULE 1303(a)(1)-BACT, 5-10-1996]

[Devices subject to this condition : D19]

E179.2 For the purpose of the following condition number(s), continuously record shall be defined as recording at least once every hour and shall be calculated upon the average of the continuous monitoring for that month.

Condition Number D 12- 6

[RULE 1303(a)(1)-BACT, 5-10-1996]

[Devices subject to this condition : D19]

### H. Applicable Rules

H23.1 This equipment is subject to the applicable requirements of the following rules or regulations:

Contaminant	Rule	Rule/Subpart
Chromium, Hexavalent	District Rule	1404

[RULE 1404, 4-6-1990]

[Devices subject to this condition : E15]



## FACILITY PERMIT TO OPERATE CARSON COGENERATION COMPANY

### SECTION D: FACILITY DESCRIPTION AND EQUIPMENT SPECIFIC CONDITIONS

The operator shall comply with the terms and conditions set forth below:

H23.2 This equipment is subject to the applicable requirements of the following rules or regulations:

Contaminant	Rule	Rule/Subpart
VOC	District Rule	464

[RULE 464, 12-7-1990]

[Devices subject to this condition : E18]

H23.3 This equipment is subject to the applicable requirements of the following rules or regulations:

Contaminant	Rule	Rule/Subpart
Refrigerants	District Rule	1415
Refrigerants	40CFR82, SUBPART	F

[RULE 1415, 10-14-1994; 40CFR 82 Subpart F, 5-14-1993]

[Devices subject to this condition : E13]

H23.4 This equipment is subject to the applicable requirements of the following rules or regulations:

Contaminant	Rule	Rule/Subpart
Halon	District Rule	1418

[RULE 1418, 9-10-1999]

[Devices subject to this condition : E16]

### K. Record Keeping/Reporting



## **FACILITY PERMIT TO OPERATE CARSON COGENERATION COMPANY**

### **SECTION D: FACILITY DESCRIPTION AND EQUIPMENT SPECIFIC CONDITIONS**

The operator shall comply with the terms and conditions set forth below:

K40.1 The operator shall provide to the District a source test report in accordance with the following specifications:

Source test results shall be submitted to the District no later than 30 days after the source test was conducted.

Emission data shall be expressed in terms of concentration (ppmv), corrected to 15 percent oxygen, (dry basis), mass rate (lb/hr), and lb/MMcf. In addition, solid PM emissions, if required to be tested, shall also be reported in terms of grains per dscf.

All exhaust flow rate shall be expressed in terms of dry standard cubic feet per minute (DSCFM) and dry actual cubic feet per minute (DACFM).

All moisture concentration shall be expressed in terms of percent corrected to 15 percent oxygen.

Source test results shall also include the oxygen levels in the exhaust, the fuel flow rate (CFH), the flue gas temperature, and the generator power output (MW) under which the test was conducted.

**[RULE 1303(b)(2)-Offset, 5-10-1996]**

[Devices subject to this condition : D19]

K48.1 The operator shall maintain records in a manner approved by the District, to demonstrate compliance with the following condition number(s):

Condition no. 1-1

Condition no. 12-3

**[RULE 1110.2, 11-14-1997; RULE 1304(a)-Modeling and Offset Exemption, 6-14-1996]**

[Devices subject to this condition : D10]

K67.1 The operator shall keep records, in a manner approved by the District, for the following parameter(s) or item(s):

fuel usage, ammonia usage, heat recovery steam generator exhaust emissions, and catalyst efficiency

**[RULE 1303(b)(2)-Offset, 5-10-1996]**

[Devices subject to this condition : D19]



## **FACILITY PERMIT TO OPERATE CARSON COGENERATION COMPANY**

### **SECTION D: FACILITY DESCRIPTION AND EQUIPMENT SPECIFIC CONDITIONS**

The operator shall comply with the terms and conditions set forth below:

K67.2 The operator shall keep records, in a manner approved by the District, for the following parameter(s) or item(s):

For architectural applications where no thinners, reducers, or other VOC containing materials are added, maintain semi-annual records for all coating consisting of (a) coating type, (b) VOC content as supplied in grams per liter (g/l) of materials for low-solids coatings, (c) VOC content as supplied in g/l of coating, less water and exempt solvent, for other coatings.

For architectural applications where thinners, reducers, or other VOC containing materials are added, maintain daily records for each coating consisting of (a) coating type, (b) VOC content as applied in grams per liter (g/l) of materials used for low-solids coatings, (c) VOC content as applied in g/l of coating, less water and exempt solvent, for other coatings.

[RULE 3004(a)(4)-Periodic Monitoring, 8-11-1995; RULE 3004(a)(4)-Periodic Monitoring, 12-12-1997]

[Devices subject to this condition : E17]